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10/609,184	06/26/2003	Thomas M. DePierri	7144-1	7636

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EXAMINER

LOWE, MICHAEL S

ART UNIT PAPER NUMBER

3652

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/609,184

Applicant(s)

DEPIERRI, THOMAS M.

Examiner

M. Scott Lowe

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/29/04, 3/5/04</u> | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 29,30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 29 & 30 recite the limitation "said shutter assembly" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8,10,24,26,33,35,37,38,40, are rejected under 35 U.S.C. 102(b) as being anticipated by DCL (RPT24 Rotary Product Trimmer RPT-10001).

Re claim 8, the DCL reference teaches a bulk material loading device, comprising:

(a) an upper casing assembly (not numbered) having inlet means for receiving a bulk material;

(b) a motor (not numbered) having a shaft and a motor housing (not numbered), wherein said motor housing is mounted to said upper casing assembly outside of said inlet means;

(c) an impeller (trimmer) in rotational communication with said shaft of said motor, wherein said impeller is aligned beneath said inlet means, wherein said impeller comprises an upper portion and a lower portion, wherein said lower portion includes a plurality of vanes (blades) adapted to disperse said bulk material, and wherein said upper portion includes a surface formed to direct said bulk material into said plurality of vanes.

Re claims 10,33,38, the DCL reference teaches level sensing means operatively positioned below said impeller (material guide) for sensing an accumulation of said bulk material.

Re claim 24, the DCL reference teaches a bulk material loading device, comprising:

(a) an upper casing assembly (not numbered) having inlet means for receiving a bulk material;

(b) a motor (not numbered) having a shaft and a motor housing (not numbered), wherein said motor housing is mounted to said upper casing assembly outside of said inlet means;

(c) an impeller (trimmer) in rotational communication with said shaft of said motor, wherein said impeller is aligned beneath said inlet means

(d) level sensing means (high level notes of section B-B) operatively positioned below said impeller for sensing an accumulation of said bulk material in a container when said bulk material in said container is at a predetermined height above an operative level of said level sensing means.

Re claim 26, the DCL reference teaches said impeller comprises an upper portion and a lower portion, wherein said lower portion includes a plurality of vanes adapted to disperse said bulk material, and wherein said upper portion includes a surface formed to direct said bulk material into said plurality of vanes.

Re claims 35,40, the DCL reference teaches the level probe protected within a well having an inlet port and bottom opening.

Re claim 37, the DCL reference teaches bulk material loading device, comprising:

- (a) an upper casing assembly having inlet means for receiving a bulk material;
- (b) a material guide (trimmer), positioned below said inlet means, having a surface capable of deflecting said bulk material; and
- (c) level sensing means (section B-B) operatively positioned below said material guide for sensing an accumulation of said bulk material in a container when said bulk material in said container is at a predetermined height above an operative level of said level sensing means.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5,9,11-13,25,28-30, are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Krambrock (US 5,660,215).

Re claim 1, the DCL reference teaches a bulk material loading device, comprising:

- (a) an upper casing assembly (not numbered) having inlet means for receiving a bulk material;
- (b) a motor (not numbered) having a shaft and a motor housing (not numbered), wherein said motor housing is mounted to said upper casing assembly outside of said inlet means;
- (c) an impeller (trimmer) in rotational communication with said shaft of said motor, wherein said impeller is aligned beneath said inlet means.

DCL does not appear to teach a movable shutter assembly.

Krambrock teaches a shutter assembly 3,12, wherein said shutter assembly is movable between a closed position preventing said device from dispersing said bulk material and an open position permitting said device to disperse said bulk material in order to control the dispersal characteristics of the bulk material (column 4, paragraphs 3-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by the general teaching of Krambrock to have a movable shutter assembly in order to control the dispersal properties of the bulk

material and also because it is clear from the DCL reference that there is intended to be a way for the material to be stopped and conveyed (high level notes of section B-B).

Since DCL's impeller is operatively connected between said motor housing and said upper casing assembly the shutter modification would also be operatively connected between said motor housing and said upper casing assembly.

Re claim 2, the DCL reference teaches level sensing means operatively positioned below said impeller for sensing an accumulation of said bulk material.

Re claims 3,11,28, the DCL reference as modified in claim 1 teaches said shutter assembly comprising:

- (a) a cylindrical shutter 13 having an upper rim and a lower rim; and
- (b) a shutter flange (not numbered) extending radially from said shutter.

Re claims 4,12,29, the DCL reference as modified in claim 1 teaches a motor housing including a shutter contact surface formed to contact said shutter assembly in a closed position and retain residual bulk material inside said device.

Re claims 5,13,30, the DCL reference as modified in claim 1 teaches said upper casing assembly comprises lifting means operatively in contact with said shutter assembly for at least partially opening said shutter assembly to permit the release of residual bulk material from said device.

Re claims 9,25, DCL does not appear to teach a movable shutter assembly.

Krambrock teaches a shutter assembly 3,12, wherein said shutter assembly is movable between a closed position preventing said device from dispersing said bulk material and an open position permitting said device to disperse said bulk material in

order to control the dispersal characteristics of the bulk material (column 4, paragraphs 3-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by the general teaching of Krambrock to have a movable shutter assembly in order to control the dispersal properties of the bulk material and also because it is clear from the DCL reference that there is intended to be a way for the material to be stopped and conveyed (high level notes of section B-B).

Since DCL's impeller is operatively connected between said motor housing and said upper casing assembly the shutter modification would also be operatively connected between said motor housing and said upper casing assembly.

Claims 6,7,14,15,31,32, are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Krambrock (US 5,660,215) and further in view of Gentilcore (US 5,052,451).

Re claims 6,14,31, the modified DCL reference does not teach multiple lifting actuators. Gentilcore teaches a plurality of lifting flanges, and wherein said lifting means comprises a plurality of lifting actuators operatively in contact with lifting flanges 22,26,42, etc., in order to raise or lower a shutter 16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the DCL reference by the general teaching of Gentilcore to have a plurality of lifting flanges, and wherein said lifting means comprises a plurality of lifting actuators operatively in contact with lifting flanges in order to raise or lower a heavy shutter in an level manner.

Re claims 7,15,32, as modified in reference to claim 6, DCL reference teaches pneumatic lifting actuators.

Claims 16,18,27, are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Felix (US 3,469,718).

Re claims 16,27, the DCL reference teaches a bulk material loading device, comprising:

- (a) an upper casing assembly (not numbered) having inlet means for receiving a bulk material;
- (b) a motor (not numbered) having a shaft and a motor housing (not numbered), wherein said motor housing is mounted to said upper casing assembly outside of said inlet means;
- (c) an impeller (trimmer) in rotational communication with said shaft of said motor, wherein said impeller is aligned beneath said inlet means and having a plurality of vanes (blades).

DCL does not appear to teach vanes oriented at a non-zero angle with respect to the vertical. Felix teaches vanes oriented at a non-zero angle with respect to the vertical in order to assure even filling (column 2, line 68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by Felix to have vanes oriented at a non-zero angle with respect to the vertical in order to assure even filling.

Re claim 18, the DCL reference teaches level sensing means operatively positioned below said impeller for sensing an accumulation of said bulk material.

Claims 17, 19-21, are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Krambrock (US 5,660,215) and further in view of Felix (US 3,469,718).

Re claim 17, DCL does not appear to teach a movable shutter assembly. Krambrock teaches a shutter assembly 3,12, wherein said shutter assembly is movable between a closed position preventing said device from dispersing said bulk material and an open position permitting said device to disperse said bulk material in order to control the dispersal characteristics of the bulk material (column 4, paragraphs 3-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by the general teaching of Krambrock to have a movable shutter assembly in order to control the dispersal properties of the bulk material and also because it is clear from the DCL reference that there is intended to be a way for the material to be stopped and conveyed (high level notes of section B-B).

Since DCL's impeller is operatively connected between said motor housing and said upper casing assembly the shutter modification would also be operatively connected between said motor housing and said upper casing assembly.

Re claims 19, the DCL reference as modified in claim 1 teaches said shutter assembly comprising:

(a) a cylindrical shutter 13 having an upper rim and a lower rim; and

(b) a shutter flange (not numbered) extending radially from said shutter.

Re claims 20, the DCL reference as modified in claim 1 teaches a motor housing including a shutter contact surface formed to contact said shutter assembly in a closed position and retain residual bulk material inside said device.

Re claims 21, the DCL reference as modified in claim 1 teaches said upper casing assembly comprises lifting means operatively in contact with said shutter assembly for at least partially opening said shutter assembly to permit the release of residual bulk material from said device.

Claims 22,23 are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Krambrock (US 5,660,215), Felix (US 3,469,718) and further in view of Gentilcore (US 5,052,451).

Re claims 22, the modified DCL reference does not teach multiple lifting actuators. Gentilcore teaches a plurality of lifting flanges, and wherein said lifting means comprises a plurality of lifting actuators operatively in contact with lifting flanges 22,26,42, etc., in order to raise or lower a shutter 16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the DCL reference by the general teaching of Gentilcore to have a plurality of lifting flanges, and wherein said lifting means comprises a plurality of lifting actuators operatively in contact with lifting flanges in order to raise or lower a heavy shutter in an level manner.

Re claims 23, as modified in reference to claim 6, DCL reference teaches pneumatic lifting actuators.

Claims 34,36,39,41 are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Cherek (US 5,748,562).

Re claim 34,39, DCL teaches a level probe (section B-B notes) but does not disclose the type of level probe. Cherek teaches a piezoelectric-based vibratory probe for sensing the level of material in a vessel (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by Cherek to have the level sensor be a piezoelectric-based vibratory probe for sensing the level of material in a vessel in a conventional way.

Re claim 36,41, DCL teaches a level probe (section B-B notes) but does not disclose the type of mounting. Cherek teaches a piezoelectric-based vibratory probe for sensing the level of material in a vessel (abstract) that is detachably mounted by a setscrew 8 (also unnumbered near item 11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by Cherek to have the probe detachably mounted by a setscrew in order to use a known probe attachment method.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is 703-305-1940. The examiner can normally be reached on 6:30am-4:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msl


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